

WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: 09/24/2012  
API #: 47-102994

Farm name: City of Philippi Operator Well No.: Badger Coal 7

LOCATION: Elevation: 1377' GL / 1395' KB Quadrangle: Philippi

District: Philippi County: Barbour  
Latitude: 8.300 Feet South of 39° Deg. 12 Min. 30 Sec.  
Longitude: 4.725 Feet West of 80° Deg. 00 Min. 00 Sec.

Company: PDC Mountaineer

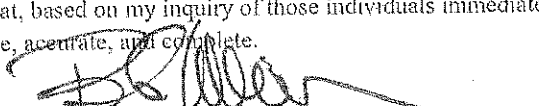
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
120 Genesis Blvd. Bridgeport, WV 26330	16"	21'	21'	
Agent: Bob Williamson	11 3/4"	77'	77'	177
Inspector: Bill Hatfield	8 5/8"	1281'	1281'	430
Date Permit Issued: 11/06/2008	5 1/2"	7710'	7710'	430
Date Well Work Commenced: 01/17/2009				
Date Well Work Completed: 02/20/2009				
Verbal Plugging:				
Date Permission granted on:	2 3/8"		7391'	
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,754'				
Total Measured Depth (ft): 7,754'				
Fresh Water Depth (ft.): Large flow at 81'				
Salt Water Depth (ft.): NA				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 90', 615'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7250  
Gas: Initial open flow N/A MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow 83 MCF/d Final open flow --- Bbl/d  
Time of open flow between initial and final tests 720 Hours  
Static rock Pressure 1100 psig (surface pressure) after 72 Hours

Second producing formation N/A Pay zone depth (ft) ---  
Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow --- MCF/d Final open flow --- Bbl/d  
Time of open flow between initial and final tests --- Hours  
Static rock Pressure --- psig (surface pressure) after --- Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

  
Signature

09/25/2012  
Date

RECEIVED  
Office of Oil & Gas

SEP 26 2012

WV Department of  
Environmental Protection

Were core samples taken? Yes \_\_\_\_\_ No XX

Were cuttings caught during drilling? Yes XX No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Schlum. Litho Dens/Comp Neutron/Caliper/GR, LaterLog/Caliper/GR, Compression/Shear Sonic Scanner, FM/IECS, Dip. Cased Hole: GR/CCL/Cement Bond Log, Mud Log from 1320-TD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

2-11-2009: RU Superior Wireline and log cased hole finding a cement top at 5818'. Perforated interval 7,280 ft – 7,330 ft (176 shots).

2-20-2009: RU Superior Well Service and perform a 1 stage Marcellus frac using 500 gal acetic acid, and 19,510 bbls of Slickwater carrying 296,300 lbs of 100-mesh sand, and 384,200 lbs of 40/70 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: \_\_\_\_\_ Top Depth \_\_\_\_\_ / \_\_\_\_\_ Bottom Depth \_\_\_\_\_  
Surface: \_\_\_\_\_

Sand & Shale	0	825	Huntersville	7358	7556
Little Lime	825	840	Oriskany	7558	7752 TD
Big Lime	870	949			
Keener	949	984			
Big Injun	1011	1082			
Gantz	1230	1342			
Fifty Foot	1360	1418			
Fourth SS	1682	1760			
Fifth SS	1769	1808			
Bayard	1841	1879			
Benson	3673	3684			
Burkett/Geneseo	7008	7025			
Tully	7025	7078			
Marcellus	7250	7344			
Onondaga	7344	7358			

**RECEIVED**  
**Office of Oil & Gas**

SEP 26 2012

**WV Department of**  
**Environmental Protection**

SEP 10 2012

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

WV Department of  
Environmental Protection

Well Operator's Report of Well Work

Farm Name: **Carolyn Farr**

Operator Well No. : **Three (3)**

LOCATION: Elevation: **1288** Quadrangle: **New Milton 7.5**  
District: **New Milton** County: **Doddridge**  
Latitude: **39.17436** Feet South of **39** Deg. **10** Min. **27.7** Sec.  
Longitude: **80.74624** Feet West of **80** Deg. **44** Min. **46.5** Sec.

Company:	<b>KEY OIL COMPANY</b>	Casing	Used	Left	Cement
	<b>22 GARTON PLAZA</b>	&	In	In	Fill Up
	<b>WESTON, WV 26452</b>	Tubing	Drilling	Well	Cu Ft
		<u>Size</u>			
Agent:	<b>Jan E. Chapman</b>				
Inspector:	<b>Dave Scrannage</b>	<b>11"</b>	<b>35'</b>	<b>Pulled</b>	<b>N/A</b>
Permit Issued:	<b>02-21-12</b>				
Well Work Commenced:	<b>07-02-12</b>	<b>9-5/8"</b>	<b>210'</b>	<b>210'</b>	<b>90 sks. CTS</b>
Well Work Completed:	<b>07-13-12</b>				
Verbal Plugging	<b>N/A</b>	<b>7"</b>	<b>2167'</b>	<b>2167'</b>	<b>300 sks. CTS</b>
Permission granted on:	<b>06-20-12</b>				
Rotary X Cable Rtg		<b>4-1/2"</b>	<b>5667'</b>	<b>5667'</b>	<b>300 sks. CT 1620'</b>
Total Depth ( feet )	<b>5733'</b>				
Fresh water depths ( ft )	<b>95'</b>				
Salt water depths ( ft )	<b>1480'</b>				
Is coal being mined in area ( Y / N )?	<b>No</b>				
Coal Depths ( ft ):	<b>NA</b>				

OPEN FLOW DATA **Alexander** **5446-5549**  
**Benson/Riley** **5086-5184**  
**Riley/Bradford** **4292-4960**


Producing formation **Speechley/Warren** Pay zone depth ( ft ) **3556-3800**  
Gas: Initial open flow **210** MCF / D Oil: Initial open flow **Show** Bbl / D  
Final open flow **1210** MCF / D Oil: Final open flow **Show** Bbl / D  
Time of open flow between initial and final tests **24** Hours  
Static rock pressure **1550** psig ( surface pressure ) after **24** Hours

**All Formations Comingled.**

Second producing formation Pay zone depth ( ft )  
Gas: Initial open flow MCF / D Oil: Initial open flow Bbl / D  
Final open flow MCF / D Oil: Final open flow Bbl / D  
Time of open flow between initial and final tests Hours  
Static rock pressure psig ( surface pressure ) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: **KEY OIL COMPANY**

By: 

PRESIDENT

Date: **August 1, 2012**

**TREATMENT:**

Alexander	(22 holes) 5446-5549	sand, water and N2: 5,000# 80/100 sand, 25,000# 20/40 sand, 344,000 SCF N2, and 177 bbl. water
Benson & Riley	(20 holes) 5086-5184	sand, water and N2: 5,000# 80/100 sand, 25,000# 20/40 sand, 393,000 SCF N2, 204 bbl. water
Riley & Bradford	(21 holes) 4292-4960	sand, water and N2: 5,000# 80/100 sand, 25,000# 20/40 sand, 370,000 SCF N2, 181 bbl. water
Speechley & Warren	(21 holes) 3556-3800	sand, water and N2: 37,000# 20/40 sand, 316,000 SCF N2, 210 bbl. water

**FORMATIONS:**

Sand & Shale	0'	2190'
Blue Monday	2190'	2200'
Sand	2200'	2300'
Injun	2300'	2350'
Sand & Shale	2350'	2500'
Weir	2500'	2570'
Shale	2570'	2670'
Gantz	2670'	2680'
Shale	2680'	2900'
Gordon	2900'	2910'
Speechley	2910'	3800'
Sand & Shale	3800'	4290'
Balltown	4290'	4500'
Sand & Shale	4500'	4950'
Riley	4950'	4960'
Sand	4960'	5090'
Benson	5090'	5170'
Shale	5170'	5180'
Alexander	5180'	5550'
Shale	5550'	5733'
TD		5733'

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Frank Maxwell**Operator Well No. : **Four A (4A)**

LOCATION: Elevation: **1165** Quadrangle: **New Milton 7.5**  
 District: **New Milton** County: **Doddridge**  
 Latitude: **39.23632** Feet South of **39** Deg. **14** Min. **10.7** Sec.  
 Longitude: **80.70539** Feet West of **80** Deg. **42** Min. **19.4** Sec.

Company: **KEY OIL COMPANY**  
**22 GARTON PLAZA**  
**WESTON, WV 26452**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	32'	32'	Sanded In
9-5/8"	168'	168'	70 sks. CTS
7"	1298'	1298'	170 sks. CTS
4-1/2"	5495'	5495'	300 sks. ETOC 2000'

Agent: **Jan E. Chapman**Inspector: **Dave Scranage**Permit Issued: **03-20-12**Well Work Commenced: **09-05-12**Well Work Completed: **09-11-12**Verbal Plugging **N/A**Permission granted on: **07-10-11**Rotary **X** Cable **Rig**Total Depth ( feet ) **5560'**Fresh water depths ( ft ) **100'**Salt water depths ( ft ) **1400'**Is coal being mined in area ( Y / N )? **No**Coal Depths ( ft ): **NA**

OPEN FLOW DATA **Alexander** **5331-5392**  
**Riley & Benson** **4904-5006**  
**Bradford** **4416-4540**  
**Balltown** **3600-3830**

Producing formation **Warren** Pay zone depth ( ft ) **3366-3480**  
 Gas: Initial open flow **97** MCF / D Oil: Initial open flow **N/A** Bbl / D  
 Final open flow **1986** MCF / D Oil: Final open flow **Show** Bbl / D  
 Time of open flow between initial and final tests **24** Hours  
 Static rock pressure **1425** psig ( surface pressure ) after **24** Hours

**All Formations Comingled.**

Second producing formation Pay zone depth ( ft )  
 Gas: Initial open flow MCF / D Oil: Initial open flow Bbl / D  
 Final open flow MCF / D Oil: Final open flow Bbl / D  
 Time of open flow between initial and final tests Hours  
 Static rock pressure psig ( surface pressure ) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: **KEY OIL COMPANY**By: 

PRESIDENT

Date: **September 21, 2012**

RECEIVED

SEP 28 2012

Environmental Protection

Frank Maxwell #4A (47-017-06106)

TREATMENT:

Alexander	(25 holes) 5331-5392	sand, water and N2: 34,500# 20/40 sand, 357,000 SCF N2, and 193 bbl. water
Riley & Benson	(20 holes) 4904-5006	sand, water and N2: 15,000# 20/40 sand, 284,000 SCF N2, and 132 bbl. water
Bradford	(20 holes) 4416-4540	sand, water and N2: 30,100# 20/40 sand, 393,000 SCF N2, and 186 bbl. water
Balltown	(20 holes) 3600-3830	sand, water and N2: 30,500# 20/40 sand, 344,000 SCF N2, and 187 bbl. water
Warren	(25 holes) 3366-3480	sand, water and N2: 30,000# 20/40 sand, 300,000 SCF N2, and 198 bbl. water

FORMATIONS:

Sand & Shale	0'	1300'
Shale	1300'	1930'
Little Lime	1930'	1950'
Blue Monday	1950'	2000'
Big Lime	2000'	2050'
Keener	2050'	2090'
Injun	2090'	2140'
Sand & Shale	2140'	2280'
Weir	2280'	2360'
Sand & Shale	2360'	2710'
Gordon	2710'	2720'
Shale	2720'	3364'
Warren	3364'	3480'
Sand & Shale	3480'	3600'
Balltown	3600'	3830'
Shale	3830'	4410'
Bradford	4410'	4540'
Shale	4540'	4900'
Riley	4900'	4910'
Shale	4910'	5000'
Benson	5000'	5010'
Shale	5010'	5330'
Alexander	5330'	5392'
Shale	5392'	5560'
TD		5560'

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Frank Maxwell**Operator Well No. : **One A (1A)**

LOCATION: Elevation: **1142** Quadrangle: **New Milton 7.5**  
 District: **New Milton** County: **Doddridge**  
 Latitude: **39.23615** Feet South of **39** Deg. **14** Min. **10.1** Sec.  
 Longitude: **80.70716** Feet West of **80** Deg. **42** Min. **25.8** Sec.

Company: **KEY OIL COMPANY**  
**22 GARTON PLAZA**  
**WESTON, WV 26452**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	32'	pulled	N/A
9-5/8"	168'	168'	70 sks. CTS
7"	1280'	1280'	170 sks. CTS
4-1/2"	2937'	2937'	160 sks. ETOC 1100'

Agent: **Jan E. Chapman**Inspector: **Dave Scranage**Permit Issued: **03-20-12**Well Work Commenced: **08-21-12**Well Work Completed: **08-28-12**Verbal Plugging **N/A**Permission granted on: **06-15-12**

Rotary X Cable Rigg

Total Depth ( feet ) **2972'**Fresh water depths ( ft ) **115'**Salt water depths ( ft ) **1300'**Is coal being mined in area ( Y / N )? **No**Coal Depths ( ft ): **NA**

OPEN FLOW DATA **Gantz & Gordon**  
**Weir**  
**Injun**  
**Keener**

**2472-2692**  
**2310-2340**  
**2108-2116**  
**2048-2056**

Producing formation **Blue Monday** Pay zone depth ( ft ) **1954-1964**Gas: Initial open flow **119** MCF / D Oil: Initial open flow **Show**Final open flow **919** MCF / D Oil: Final open flow **Show**Time of open flow between initial and final tests **24**Static rock pressure **1010** psig ( surface pressure ) after **24****All Formations Comingled.**

Second producing formation

Gas: Initial open flow MCF / D Oil: Initial open flow

Final open flow MCF / D Oil: Final open flow

Time of open flow between initial and final tests

Static rock pressure psig ( surface pressure ) after

**WV Department of**  
**Environmental Protection**  
 Bbl / D  
 Bbl / D  
 Hours  
 Hours

Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: **KEY OIL COMPANY**By: 

PRESIDENT

Date: **September 12, 2012**

Frank Maxwell #1A (47-017-06109)

**TREATMENT:**

Gantz & Gordon	(20 holes) 2472-2692	sand, water and N2: 30,000# 20/40 sand, 300,000 SCF N2, and 175 bbl. water
Weir	(20 holes) 2310-2340	sand, water and N2: 20,000# 20/40 sand, 250,000 SCF N2, and 139 bbl. water
Injun	(20 holes) 2108-2116	sand, water and N2: 20,000# 20/40 sand, 236,000 SCF N2, and 140 bbl. water
Keener	(20 holes) 2048-2056	sand, water and N2: 12,500# 20/40 sand, 196,000 SCF N2, and 108 bbl. water
Blue Monday	(20 holes) 1954-1964	sand, water and N2: 30,000# 20/40 sand, 319,000 SCF N2, and 162 bbl. water

**FORMATIONS:**

Sand & Shale	0'	1260'
Shale	1260'	1740'
Salt Sands	1740'	1750'
Shale	1750'	1930'
Little Lime	1930'	1940'
Blue Monday	1940'	1980'
Shale	1980'	2040'
Keener	2040'	2060'
Injun	2060'	2120'
Sand & Shale	2120'	2290'
Weir	2290'	2340'
Shale	2340'	2470'
Gantz	2470'	2480'
Shale	2480'	2680'
Gordon	2680'	2692'
Shale	2692'	2972'
TD		2972'



State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Frank Maxwell**Operator Well No. : **Two A (2A)**

LOCATION: Elevation: **1248** Quadrangle: **New Milton 7.5**  
 District: **New Milton** County: **Doddridge**  
 Latitude: **39.23337** Feet South of **39** Deg. **14** Min. **00.1** Sec.  
 Longitude: **80.70797** Feet West of **80** Deg. **42** Min. **28.7** Sec.

Company: **KEY OIL COMPANY**  
**22 GARTON PLAZA**  
**WESTON, WV 26452**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	60'	60'	Sanded In
9-5/8"	168'	168'	70 sks. CTS
7"	1311'	1311'	200 sks. CTS
4-1/2"	2978'	2978'	160 sks. ETOC 950'

Agent: **Jan E. Chapman**  
 Inspector: **Dave Scrannage**  
 Permit Issued: **05-12-12**  
 Well Work Commenced: **08-16-12**  
 Well Work Completed: **08-22-12**  
 Verbal Plugging **N/A**  
 Permission granted on: **07-14-12**  
 Rotary X Cable Rig  
 Total Depth ( feet ) **3054'**  
 Fresh water depths ( ft ) **115'**  
 Salt water depths ( ft ) **1410'**  
 Is coal being mined in area ( Y / N )? **No**  
 Coal Depths ( ft ): **NA**

OPEN FLOW DATA **Gantz & Gordon**  
**Weir**  
**Keener & Injun**

**2600-2820**  
**2394-2458**  
**2178-2232**

**RECEIVED**  
**Office of Oil & Gas**

SEP 17 2012

Producing formation **Blue Monday** Pay zone depth ( ft ) **2096-2106**  
 Gas: Initial open flow **116** MCF / D Oil: Initial open flow **Show** Bbl / D  
 Final open flow **822** MCF / D Oil: Final open flow **2** Bbl / D  
 Time of open flow between initial and final tests **24** Hours  
 Static rock pressure **1000** psig ( surface pressure ) after **24** Hours

**All Formations Comingled.**

Second producing formation Pay zone depth ( ft )  
 Gas: Initial open flow MCF / D Oil: Initial open flow Bbl / D  
 Final open flow MCF / D Oil: Final open flow Bbl / D  
 Time of open flow between initial and final tests Hours  
 Static rock pressure psig ( surface pressure ) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: **KEY OIL COMPANY**By: 

PRESIDENT

Date: **September 7, 2012**

Maxwell #2A (47-017-06110)

TREATMENT:

Gantz & Gordon	(20 holes) 2600-2820	sand, water and N2: 30,300# 20/40 sand, 290,000 SCF N2, and 184 bbl. water
Weir	(21 holes) 2394-2458	sand, water and N2: 20,000# 20/40 sand, 248,000 SCF N2, and 153 bbl. water
Keener & Injun	(25 holes) 2178-2232	sand, water and N2: 35,000# 20/40 sand, 397,000 SCF N2, and 221 bbl. water
Blue Monday	(20 holes) 2096-2106	sand, water and N2: 28,600# 20/40 sand, 246,000 SCF N2, and 190 bbl. water

FORMATIONS:

Sand & Shale	0'	1300'
Shale	1300'	1600'
Salt Sand	1600'	1670'
Sand & Shale	1670'	1910'
Little Lime	1910'	1930'
Shale	1930'	2070'
Blue Monday	2070'	2110'
Shale	2110'	2170'
Keener	2170'	2180'
Injun	2180'	2250'
Sand	2250'	2390'
Weir	2390'	2480'
Shale	2480'	2600'
Gantz	2600'	2610'
Shale	2610'	2810'
Gordon	2810'	2820'
Shale	2820'	3054'
TD		3054'

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Vada Barnett**Operator Well No. : **Three (3)**

LOCATION: Elevation: **1262** Quadrangle: **Oxford 7.5**  
 District: **New Milton** County: **Doddridge**  
 Latitude: **39.18272** Feet South of **39** Deg. **10** Min. **57.8** Sec.  
 Longitude: **80.75342** Feet West of **80** Deg. **45** Min. **12.3** Sec.

Company: **KEY OIL COMPANY**  
**22 GARTON PLAZA**  
**WESTON, WV 26452**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	32'	pulled	N/A
9-5/8"	168'	168'	70 sks. CTS
7"	1353'	1353'	200 sks. CTS
4-1/2"	2937'	2937'	160 sks. ETOC 1100'

Agent: **Jan E. Chapman**Inspector: **Dave Scrannage**Permit Issued: **06-12-12**Well Work Commenced: **08-21-12**Well Work Completed: **08-26-12**Verbal Plugging **N/A**Permission granted on: **07-18-12**

Rotary X Cable Rlg

Total Depth ( feet ) **3044'**Fresh water depths ( ft ) **97'**Salt water depths ( ft ) **1300'**Is coal being mined in area ( Y / N )? **No**Coal Depths ( ft ): **NA**

OPEN FLOW DATA **Gantz & Gordon**  
**Weir**  
**Injun**  
**Keener**

**2564-2795****2366-2438****2218-2224****2150-2156****2078-2088**Producing formation **Blue Monday**

Pay zone depth ( ft )

Gas: Initial open flow **91** MCF / D Oil: Initial open flow **Show**Final open flow **671** MCF / D Oil: Final open flow **Show**Time of open flow between initial and final tests **24**Static rock pressure **1060** psig ( surface pressure ) after **24****All Formations Comingled.**

Second producing formation

Pay zone depth ( ft )

Gas: Initial open flow MCF / D Oil: Initial open flow

Final open flow MCF / D Oil: Final open flow

Time of open flow between initial and final tests

Static rock pressure psig ( surface pressure ) after

Bbl / D

Bbl / D

Hours

Hours

Bbl / D

Bbl / D

Hours

Hours

**RECEIVED**  
**Office of Oil & Gas**

SEP 17 2012

WV Department of  
 Environmental Protection

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: **KEY OIL COMPANY**By: 

PRESIDENT

Date: **September 10, 2012**

Vada Barnett #3 (47-017-06123)

**TREATMENT:**

Gantz & Gordon	(20 holes) 2564-2795	sand, water and N2: 30,000# 20/40 sand, 298,000 SCF N2, and 172 bbl. water
Weir	(25 holes) 2366-2438	sand, water and N2: 25,200# 20/40 sand, 286,000 SCF N2, and 155 bbl. water
Injun	(20 holes) 2218-2224	sand, water and N2: 20,000# 20/40 sand, 236,000 SCF N2, and 137 bbl. water
Keener	(20 holes) 2150-2156	sand, water and N2: 8,700# 20/40 sand, 190,000 SCF N2, and 97 bbl. water
Blue Monday	(20 holes) 2078-2088	sand, water and N2: 20,000# 20/40 sand, 185,000 SCF N2, and 154 bbl. water

**FORMATIONS:**

Sand & Shale	0'	1350'
Salt Sands	1350'	1630'
Shale	1630'	2030'
Little Lime	2030'	2060'
Blue Monday	2060'	2085'
Shale	2085'	2150'
Keener	2150'	2180'
Sand & Shale	2180'	2200'
Injun	2200'	2230'
Shale	2230'	2360'
Weir	2360'	2450'
Sand & Shale	2450'	2560'
Gantz	2560'	2570'
Shale	2570'	2790'
Gordon	2790'	2800'
Shale	2800'	3044'
TD		3044'

WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: 09/26/12  
API #: 47-023-00034 *PPR*

Farm name: J. P. GEARY Operator Well No.: 1 ST

LOCATION: Elevation: 3,427' Quadrangle: GREENLAND GAP 7.5'

District: UNION County: GRANT  
Latitude: 39.19041 N Feet South of Deg. Min. Sec.  
Longitude 79.24678 E Feet West of Deg. Min. Sec.

Company: CARRIZO (MARCELLUS) WV LLC

Address: 500 DALLAS ST., SUITE 2300	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
HOUSTON, TX 77002	13-3/8"	360'	360'	SURFACE
Agent:	9-5/8"	3,286'	3,285'	SURFACE
Inspector:	5-1/2"	10,814'	10,814'	6,000' TOC
Date Permit Issued: 8/17/10	3-1/2" liner	9,129' -	9,129' -	148 cu ft
Date Well Work Commenced: 8/25/10		11,496'	11,496'	
Date Well Work Completed: rig release 9/23/10				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>	UDI #21			
Total Vertical Depth (ft): 11,496'				
Total Measured Depth (ft): 9,952'				
Fresh Water Depth (ft.): 100'				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? NO				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Pay zone depth (ft)  
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  
Final open flow MCF/d Final open flow Bbl/d  
Time of open flow between initial and final tests Hours  
Static rock Pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)  
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  
Final open flow MCF/d Final open flow Bbl/d  
Time of open flow between initial and final tests Hours  
Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

*Carol A. Pruitt*  
Signature

9/26/12  
Date

Were core samples taken? Yes \_\_\_\_\_ No X

Were cuttings caught during drilling? Yes X No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD - GAMMA RAY

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

4/3/11 - 6/20/11: PERFORATED 9,947' - 11,414', FRAC'D W/ 739,300 LBS SAND

+ 18,680 BBLS FLUID + 30 BBLS 15% HCL ACID

NO PRODUCTION RECOVERED, WELL SHUT-IN, TEMPORARILY ABANDONED

Plug Back Details Including Plug Type and Depth(s): \* SEE NOTE BELOW

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
-------------------------------------	-----------	---	--------------

MARCELLUS SHALE	9,938'		TD @ 11,496
-----------------	--------	--	-------------

HORIZONTAL LATERAL DRILLED IN THE MARCELLUS SHALE FORMATION

\* NOTE: SPOT CEMENT PLUG 9,770'-10,627' W/ 89 SX (105 CU FT) CLASS A. CIBP SET @ 9,662' RUN & SET WHIPSTOCK. MILLED WINDOW IN 5-1/2" CASING @ 9,658' AND DRILLED HORIZONTAL LATERAL TO TD @ 11,496. SET 3-1/2" LINER 9,129' - 11,496' & CEMENTED W/ 108 SX CLASS A

WR-35  
Rev (8-10)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: 10-11-11  
API #: 47-41-05647

Farm name: Woofert, Betty

Operator Well No.: B. Woofert #5

RECEIVED  
Office of Oil & Gas

LOCATION: Elevation: 1079'

Quadrangle: Camden 7.5'

SEP 17 2012

District: Freemans Creek

County: Lewis

Latitude: 11470

Feet South of 39

Deg. 07

Min. 30

Sec.

Longitude: 9560

Feet West of 80

Deg. 35

Min. 00

Sec.

WV Department of  
Environmental Protection

Company: Sutton's Exploration & Production Company LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
RT 2 Box 118 West Union WV 26456	9 5/8"	30'		Sand
Agent: <u>Jeremy Sutton</u>	7"	422'	422'	CTS
Inspector: <u>Bryan Harris</u>	4 1/2"		1939'	105
Date Permit Issued: <u>11-09-10</u>				
Date Well Work Commenced: <u>9-10-11</u>				
Date Well Work Completed: <u>10-04-11</u>				
Verbal Plugging:				
Date Permission granted on: <u>9-08-11</u>				
Rotary X Cable Rig				
Total Vertical Depth (ft): <u>1952'</u>				
Total Measured Depth (ft): <u>1952'</u>				
Fresh Water Depth (ft.): <u>68'</u>				
Salt Water Depth (ft.): <u>1140'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Big Injun Sand Pay zone depth (ft) 1885-91

Gas: Initial open flow ODOR MCF/d Oil: Initial open flow ODOR Bbl/d

Final open flow 252 MCF/d Final open flow 15 Bbl/d

Time of open flow between initial and final tests 120 Hours

Static rock Pressure 310 psig (surface pressure) after 8 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ Hours

Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

  
Signature

10/12/11  
Date

Were core samples taken? Yes \_\_\_\_\_ No ☒

Were cuttings caught during drilling? Yes ☒ No \_\_\_\_\_

Were ☒ Electrical, \_\_\_\_\_ Mechanical, \_\_\_\_\_ or Geophysical logs recorded on this well?  
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Big Injun Sand 1885-1891, with 16 holes. Broke down with 500 gals. 15% HCL acid at 3742#. Slick water fraced with 643 sacks 20/40 mesh sand, 2211 bbls. of sand laden fluid. Avg. treating pres. 2705#, Avg. rate 40 BPM.

Formations Encountered:

Top Depth

Bottom Depth

Surface:

FILL	0-10	
SAND&SHALE	10-960	
SANDY SHALE	960-1140	
SAND	1140-1226	
SANDY SHALE	1226-1460	
SAND	1460-1565	
SHALE	1565-1610	
SAND	1610-1646	
SANDY SHALE	1646-1774	
BIG LIME	1774-1884	OIL ODOR @1830
BIG INJUN	1884-1952	GAS SHOW @ 1885
TD	1952	



WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: 11-Oct-2011  
API #: 47-085-09944

Farm name: Goff, Dennis W. & Retha M. Operator Well No.: T.J. Parks #1

LOCATION: Elevation: 878' Quadrangle: Smithville 7.5'

District: Murphy County: Ritchie  
Latitude: 9300 Feet South of 39 Deg. 02 Min 30 Sec.  
Longitude 4210 Feet West of 81 Deg. 00 Min 00 Sec.

Company: Murvin & Meier Oil Co.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: P. O. Box 396				
Olney, Illinois 62450	16"	23'	23'	
Agent: P. Nathan Bowles, Jr.				
Inspector: Mr. David Cowan	11 3/4"	254.3'	254.3'	177
Date Permit Issued: 10/11/2011				
Date Well Work Commenced: 12/8/2011	8 5/8"	1657.1'	1657.1'	394.8
Date Well Work Completed: 8/30/2012				
Verbal Plugging:	4 1/2"	6092.8'	6092.8'	813.1
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 6100'				
Total Measured Depth (ft): 6100'				
Fresh Water Depth (ft.): 24'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
Void(s) encounter (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation 2<sup>nd</sup> Elk, Rhinestreet, Lower Rhinestreet Pay zone depth (ft) 5063' to 6026'  
Gas: Initial open flow show MCF/d Oil: Initial open flow - Bbl/d  
Final open flow 815 MCF/d Final open flow show Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 1435 psig (surface pressure) after 72 Hours

RECEIVED  
Office of Oil & Gas

Second producing formation Bradford, Benson, Alexander Pay zone depth (ft) 3720' to 4824'  
Gas: Initial open flow show MCF/d Oil: Initial open flow - Bbl/d  
Final open flow 815 MCF/d Final open flow show Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 1435 psig (surface pressure) after 72 Hours

WV Department of  
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all of the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signed: MURVIN & MEIER OIL CO.  
By: Cary L. Hill Vice-Pres.  
Date: September 18, 2012

Were core samples taken? Yes\_\_\_ No\_\_X\_\_ Were cuttings caught during drilling? Yes\_\_\_ No\_\_X\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list:

Photo Density Compensated Neutron Array Induction

**NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.**

**Perforated Intervals, Fracturing, or Stimulating:**

5912' to 6026':	1000 gals 15% HCL, 1661 bbls fluid, 10,000 lbs 80/100, 40,600 lbs 20/40
5590' to 5798':	500 gals 15% HCL, 124 bbls fluid, 706 MSCF Nitrogen, 20,000 lbs 20/40
5063' to 5428':	500 gals 15% HCL, 154 bbls fluid, 882 MSCF Nitrogen, 30,000 lbs 20/40
4702' to 4824':	500 gals 15% HCL, 700 MSCF Nitrogen
4487' to 4550':	500 gals 15% HCL, 501 MSCF Nitrogen
3720' to 4230':	500 gals 15% HCL, 601 MSCF Nitrogen

**Plug Back Details Including Plug Type and Depth(s):**

Formations Encountered	Top Depth	Bottom Depth
Fill	0	2
Red Rock/Sand	2	23
Sand	23	45
Red Rock/Shale	45	75
Sand/Shale	75	90
Red Rock/Shale	90	115
Sand/Shale	115	200
Sand	200	278
Sand/Shale	278	305
Sand	305	460
Red Rock/Sand/Shale	460	975
Sand	975	1400
3rd Salt Sand	1400	1445
Sand/Shale	1445	1555
Maxon	1555	1570
Shale	1570	1684
Little Lime	1684	1700
Shale	1700	1736
Big Lime	1736	1771
Keener	1771	1776
Shale	1776	1783

Injun	1783	1856
Sand/Shale	1856	2188
Berea	2188	2207
Shale	2207	2414
Gordon	2414	2416
Sand/Shale	2416	3164
Warren	3164	3181
Sand/Shale	3181	3578
Speechly	3578	3710
Shale	3710	4219
Bradford	4219	4230
Shale	4230	4442
Riley	4442	4526
Shale	4526	4547
Benson	4547	4549
Shale	4549	4724
Alexander	4724	4826
Shale	4826	5097
First Elk	5097	5124
Shale	5124	5392
Second Elk	5392	5428
Shale	5428	5581
Rhinestreet	5581	6044
Shale	6044	6100

**Total Depth** 6100

WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: August 23, 2012  
API #: 47-095-2005

REVISED  
8/23/12  
(R-0)

Farm name: Roger Weese Operator Well No.: Weese Hunter 1002

LOCATION: Elevation: 767' Quadrangle: Shirley

District: McElroy County: Tyler  
Latitude: 39.424412 Feet South of 39 Deg. 25 Min. 27.89 Sec.  
Longitude: -80.6253 Feet West of 80 Deg. 49 Min. 31.09 Sec.

Company: Triad Hunter, LLC

Address: P.O. Box 430	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	40'	40'	
Inspector: Joe Taylor	13 3/8"	1421'	1421'	432 cu. ft.
Date Permit Issued: July 19, 2010	9 5/8"	2752'	2752'	1088 cu. ft.
Date Well Work Commenced: 07/23/2011	5 1/2"	6444.5'	6444.5'	1784.35 cu. ft.
Date Well Work Completed: 10/06/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6475'				
Total Measured Depth (ft): 6475'				
Fresh Water Depth (ft.): 80'				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 779-780, 1132-1137, 1189-1240, 1240-1241, 1241-1242, 1242-1243, 1243-1244, 1244-1245, 1245-1246, 1246-1247, 1247-1248, 1248-1249, 1249-1250, 1250-1251, 1251-1252, 1252-1253, 1253-1254, 1254-1255, 1255-1256, 1256-1257, 1257-1258, 1258-1259, 1259-1260, 1260-1261, 1261-1262, 1262-1263, 1263-1264, 1264-1265, 1265-1266, 1266-1267, 1267-1268, 1268-1269, 1269-1270, 1270-1271, 1271-1272, 1272-1273, 1273-1274, 1274-1275, 1275-1276, 1276-1277, 1277-1278, 1278-1279, 1279-1280, 1280-1281, 1281-1282, 1282-1283, 1283-1284, 1284-1285, 1285-1286, 1286-1287, 1287-1288, 1288-1289, 1289-1290, 1290-1291, 1291-1292, 1292-1293, 1293-1294, 1294-1295, 1295-1296, 1296-1297, 1297-1298, 1298-1299, 1299-1300, 1300-1301, 1301-1302, 1302-1303, 1303-1304, 1304-1305, 1305-1306, 1306-1307, 1307-1308, 1308-1309, 1309-1310, 1310-1311, 1311-1312, 1312-1313, 1313-1314, 1314-1315, 1315-1316, 1316-1317, 1317-1318, 1318-1319, 1319-1320, 1320-1321, 1321-1322, 1322-1323, 1323-1324, 1324-1325, 1325-1326, 1326-1327, 1327-1328, 1328-1329, 1329-1330, 1330-1331, 1331-1332, 1332-1333, 1333-1334, 1334-1335, 1335-1336, 1336-1337, 1337-1338, 1338-1339, 1339-1340, 1340-1341, 1341-1342, 1342-1343, 1343-1344, 1344-1345, 1345-1346, 1346-1347, 1347-1348, 1348-1349, 1349-1350, 1350-1351, 1351-1352, 1352-1353, 1353-1354, 1354-1355, 1355-1356, 1356-1357, 1357-1358, 1358-1359, 1359-1360, 1360-1361, 1361-1362, 1362-1363, 1363-1364, 1364-1365, 1365-1366, 1366-1367, 1367-1368, 1368-1369, 1369-1370, 1370-1371, 1371-1372, 1372-1373, 1373-1374, 1374-1375, 1375-1376, 1376-1377, 1377-1378, 1378-1379, 1379-1380, 1380-1381, 1381-1382, 1382-1383, 1383-1384, 1384-1385, 1385-1386, 1386-1387, 1387-1388, 1388-1389, 1389-1390, 1390-1391, 1391-1392, 1392-1393, 1393-1394, 1394-1395, 1395-1396, 1396-1397, 1397-1398, 1398-1399, 1399-1400, 1400-1401, 1401-1402, 1402-1403, 1403-1404, 1404-1405, 1405-1406, 1406-1407, 1407-1408, 1408-1409, 1409-1410, 1410-1411, 1411-1412, 1412-1413, 1413-1414, 1414-1415, 1415-1416, 1416-1417, 1417-1418, 1418-1419, 1419-1420, 1420-1421, 1421-1422, 1422-1423, 1423-1424, 1424-1425, 1425-1426, 1426-1427, 1427-1428, 1428-1429, 1429-1430, 1430-1431, 1431-1432, 1432-1433, 1433-1434, 1434-1435, 1435-1436, 1436-1437, 1437-1438, 1438-1439, 1439-1440, 1440-1441, 1441-1442, 1442-1443, 1443-1444, 1444-1445, 1445-1446, 1446-1447, 1447-1448, 1448-1449, 1449-1450, 1450-1451, 1451-1452, 1452-1453, 1453-1454, 1454-1455, 1455-1456, 1456-1457, 1457-1458, 1458-1459, 1459-1460, 1460-1461, 1461-1462, 1462-1463, 1463-1464, 1464-1465, 1465-1466, 1466-1467, 1467-1468, 1468-1469, 1469-1470, 1470-1471, 1471-1472, 1472-1473, 1473-1474, 1474-1475, 1475-1476, 1476-1477, 1477-1478, 1478-1479, 1479-1480, 1480-1481, 1481-1482, 1482-1483, 1483-1484, 1484-1485, 1485-1486, 1486-1487, 1487-1488, 1488-1489, 1489-1490, 1490-1491, 1491-1492, 1492-1493, 1493-1494, 1494-1495, 1495-1496, 1496-1497, 1497-1498, 1498-1499, 1499-1500, 1500-1501, 1501-1502, 1502-1503, 1503-1504, 1504-1505, 1505-1506, 1506-1507, 1507-1508, 1508-1509, 1509-1510, 1510-1511, 1511-1512, 1512-1513, 1513-1514, 1514-1515, 1515-1516, 1516-1517, 1517-1518, 1518-1519, 1519-1520, 1520-1521, 1521-1522, 1522-1523, 1523-1524, 1524-1525, 1525-1526, 1526-1527, 1527-1528, 1528-1529, 1529-1530, 1530-1531, 1531-1532, 1532-1533, 1533-1534, 1534-1535, 1535-1536, 1536-1537, 1537-1538, 1538-1539, 1539-1540, 1540-1541, 1541-1542, 1542-1543, 1543-1544, 1544-1545, 1545-1546, 1546-1547, 1547-1548, 1548-1549, 1549-1550, 1550-1551, 1551-1552, 1552-1553, 1553-1554, 1554-1555, 1555-1556, 1556-1557, 1557-1558, 1558-1559, 1559-1560, 1560-1561, 1561-1562, 1562-1563, 1563-1564, 1564-1565, 1565-1566, 1566-1567, 1567-1568, 1568-1569, 1569-1570, 1570-1571, 1571-1572, 1572-1573, 1573-1574, 1574-1575, 1575-1576, 1576-1577, 1577-1578, 1578-1579, 1579-1580, 1580-1581, 1581-1582, 1582-1583, 1583-1584, 1584-1585, 1585-1586, 1586-1587, 1587-1588, 1588-1589, 1589-1590, 1590-1591, 1591-1592, 1592-1593, 1593-1594, 1594-1595, 1595-1596, 1596-1597, 1597-1598, 1598-1599, 1599-1600, 1600-1601, 1601-1602, 1602-1603, 1603-1604, 1604-1605, 1605-1606, 1606-1607, 1607-1608, 1608-1609, 1609-1610, 1610-1611, 1611-1612, 1612-1613, 1613-1614, 1614-1615, 1615-1616, 1616-1617, 1617-1618, 1618-1619, 1619-1620, 1620-1621, 1621-1622, 1622-1623, 1623-1624, 1624-1625, 1625-1626, 1626-1627, 1627-1628, 1628-1629, 1629-1630, 1630-1631, 1631-1632, 1632-1633, 1633-1634, 1634-1635, 1635-1636, 1636-1637, 1637-1638, 1638-1639, 1639-1640, 1640-1641, 1641-1642, 1642-1643, 1643-1644, 1644-1645, 1645-1646, 1646-1647, 1647-1648, 1648-1649, 1649-1650, 1650-1651, 1651-1652, 1652-1653, 1653-1654, 1654-1655, 1655-1656, 1656-1657, 1657-1658, 1658-1659, 1659-1660, 1660-1661, 1661-1662, 1662-1663, 1663-1664, 1664-1665, 1665-1666, 1666-1667, 1667-1668, 1668-1669, 1669-1670, 1670-1671, 1671-1672, 1672-1673, 1673-1674, 1674-1675, 1675-1676, 1676-1677, 1677-1678, 1678-1679, 1679-1680, 1680-1681, 1681-1682, 1682-1683, 1683-1684, 1684-1685, 1685-1686, 1686-1687, 1687-1688, 1688-1689, 1689-1690, 1690-1691, 1691-1692, 1692-1693, 1693-1694, 1694-1695, 1695-1696, 1696-1697, 1697-1698, 1698-1699, 1699-1700, 1700-1701, 1701-1702, 1702-1703, 1703-1704, 1704-1705, 1705-1706, 1706-1707, 1707-1708, 1708-1709, 1709-1710, 1710-1711, 1711-1712, 1712-1713, 1713-1714, 1714-1715, 1715-1716, 1716-1717, 1717-1718, 1718-1719, 1719-1720, 1720-1721, 1721-1722, 1722-1723, 1723-1724, 1724-1725, 1725-1726, 1726-1727, 1727-1728, 1728-1729, 1729-1730, 1730-1731, 1731-1732, 1732-1733, 1733-1734, 1734-1735, 1735-1736, 1736-1737, 1737-1738, 1738-1739, 1739-1740, 1740-1741, 1741-1742, 1742-1743, 1743-1744, 1744-1745, 1745-1746, 1746-1747, 1747-1748, 1748-1749, 1749-1750, 1750-1751, 1751-1752, 1752-1753, 1753-1754, 1754-1755, 1755-1756, 1756-1757, 1757-1758, 1758-1759, 1759-1760, 1760-1761, 1761-1762, 1762-1763, 1763-1764, 1764-1765, 1765-1766, 1766-1767, 1767-1768, 1768-1769, 1769-1770, 1770-1771, 1771-1772, 1772-1773, 1773-1774, 1774-1775, 1775-1776, 1776-1777, 1777-1778, 1778-1779, 1779-1780, 1780-1781, 1781-1782, 1782-1783, 1783-1784, 1784-1785, 1785-1786, 1786-1787, 1787-1788, 1788-1789, 1789-1790, 1790-1791, 1791-1792, 1792-1793, 1793-1794, 1794-1795, 1795-1796, 1796-1797, 1797-1798, 1798-1799, 1799-1800, 1800-1801, 1801-1802, 1802-1803, 1803-1804, 1804-1805, 1805-1806, 1806-1807, 1807-1808, 1808-1809, 1809-1810, 1810-1811, 1811-1812, 1812-1813, 1813-1814, 1814-1815, 1815-1816, 1816-1817, 1817-1818, 1818-1819, 1819-1820, 1820-1821, 1821-1822, 1822-1823, 1823-1824, 1824-1825, 1825-1826, 1826-1827, 1827-1828, 1828-1829, 1829-1830, 1830-1831, 1831-1832, 1832-1833, 1833-1834, 1834-1835, 1835-1836, 1836-1837, 1837-1838, 1838-1839, 1839-1840, 1840-1841, 1841-1842, 1842-1843, 1843-1844, 1844-1845, 1845-1846, 1846-1847, 1847-1848, 1848-1849, 1849-1850, 1850-1851, 1851-1852, 1852-1853, 1853-1854, 1854-1855, 1855-1856, 1856-1857, 1857-1858, 1858-1859, 1859-1860, 1860-1861, 1861-1862, 1862-1863, 1863-1864, 1864-1865, 1865-1866, 1866-1867, 1867-1868, 1868-1869, 1869-1870, 1870-1871, 1871-1872, 1872-1873, 1873-1874, 1874-1875, 1875-1876, 1876-1877, 1877-1878, 1878-1879, 1879-1880, 1880-1881, 1881-1882, 1882-1883, 1883-1884, 1884-1885, 1885-1886, 1886-1887, 1887-1888, 1888-1889, 1889-1890, 1890-1891, 1891-1892, 1892-1893, 1893-1894, 1894-1895, 1895-1896, 1896-1897, 1897-1898, 1898-1899, 1899-1900, 1900-1901, 1901-1902, 1902-1903, 1903-1904, 1904-1905, 1905-1906, 1906-1907, 1907-1908, 1908-1909, 1909-1910, 1910-1911, 1911-1912, 1912-1913, 1913-1914, 1914-1915, 1915-1916, 1916-1917, 1917-1918, 1918-1919, 1919-1920, 1920-1921, 1921-1922, 1922-1923, 1923-1924, 1924-1925, 1925-1926, 1926-1927, 1927-1928, 1928-1929, 1929-1930, 1930-1931, 1931-1932, 1932-1933, 1933-1934, 1934-1935, 1935-1936, 1936-1937, 1937-1938, 1938-1939, 1939-1940, 1940-1941, 1941-1942, 1942-1943, 1943-1944, 1944-1945, 1945-1946, 1946-1947, 1947-1948, 1948-1949, 1949-1950, 1950-1951, 1951-1952, 1952-1953, 1953-1954, 1954-1955, 1955-1956, 1956-1957, 1957-1958, 1958-1959, 1959-1960, 1960-1961, 1961-1962, 1962-1963, 1963-1964, 1964-1965, 1965-1966, 1966-1967, 1967-1968, 1968-1969, 1969-1970, 1970-1971, 1971-1972, 1972-1973, 1973-1974, 1974-1975, 1975-1976, 1976-1977, 1977-1978, 1978-1979, 1979-1980, 1980-1981, 1981-1982, 1982-1983, 1983-1984, 1984-1985, 1985-1986, 1986-1987, 1987-1988, 1988-1989, 1989-1990, 1990-1991, 1991-1992, 1992-1993, 1993-1994, 1994-1995, 1995-1996, 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024, 2024-2025, 2025-2026, 2026-2027, 2027-2028, 2028-2029, 2029-2030, 2030-2031, 2031-2032, 2032-2033, 2033-2034, 2034-2035, 2035-2036, 2036-2037, 2037-2038, 2038-2039, 2039-2040, 2040-2041, 2041-2042, 2042-2043, 2043-2044, 2044-2045, 2045-2046, 2046-2047, 2047-2048, 2048-2049, 2049-2050, 2050-2051, 2051-2052, 2052-2053, 2053-2054, 2054-2055, 2055-2056, 2056-2057, 2057-2058, 2058-2059, 2059-2060, 2060-2061, 2061-2062, 2062-2063, 2063-2064, 2064-2065, 2065-2066, 2066-2067, 2067-2068, 2068-2069, 2069-2070, 2070-2071, 2071-2072, 2072-2073, 2073-2074, 2074-2075, 2075-2076, 2076-2077, 2077-2078, 2078-2079, 2079-2080, 2080-2081, 2081-2082, 2082-2083, 2083-2084, 2084-2085, 2085-2086, 2086-2087, 2087-2088, 2088-2089, 2089-2090, 2090-2091, 2091-2092, 2092-2093, 2093-2094, 2094-2095, 2095-2096, 2096-2097, 2097-2098, 2098-2099, 2099-2100, 2100-2101, 2101-2102, 2102-2103, 2103-2104, 2104-2105, 2105-2106, 2106-2107, 2107-2108, 2108-2109, 2109-2110, 2110-2111, 2111-2112, 2112-2113, 2113-2114, 2114-2115, 2115-2116, 2116-2117, 2117-2118, 2118-2119, 2119-2120, 2120-2121, 2121-2122, 2122-2123, 2123-2124, 2124-2125, 2125-2126, 2126-2127, 2127-2128, 2128-2129, 2129-2130, 2130-2131, 2131-2132, 2132-2133, 2133-2134, 2134-2135, 2135-2136, 2136-2137, 2137-2138, 2138-2139, 2139-2140, 2140-2141, 2141-2142, 2142-2143, 2143-2144, 2144-2145, 2145-2146, 2146-2147, 2147-2148, 2148-2149, 2149-2150, 2150-2151, 2151-2152, 2152-2153, 2153-2154, 2154-2155, 2155-2156, 2156-2157, 2157-2158, 2158-2159, 2159-2160, 2160-2161, 2161-2162, 2162-2163, 2163-2164, 2164-2165, 2165-2166, 2166-2167, 2167-2168, 2168-2169, 2169-2170, 2170-2171, 2171-2172, 2172-2173, 2173-2174, 2174-2175, 2175-2176, 2176-2177, 2177-2178, 2178-2179, 2179-2180, 2180-2181, 2181-2182, 2182-2183, 2183-2184, 2184-2185, 2185-2186, 2186-2187, 2187-2188, 2188-2189, 2189-2190, 2190-2191, 2191-2192, 2192-2193, 2193-2194, 2194-2195, 2195-2196, 2196-2197, 2197-2198, 2198-2199, 2199-2200, 2200-2201, 2201-2202, 2202-2203, 2203-2204, 2204-2205, 2205-2206, 2206-2207, 2207-2208, 2208-2209, 2209-2210, 2210-2211, 2211-2212, 2212-2213, 2213-2214, 2214-2215, 2215-2216, 2216-2217, 2217-2218, 2218-2219, 2219-2220, 2220-2221, 2221-2222, 2222-2223, 2223-2224, 2224-2225, 2225-2226, 2226-2227, 2227-2228, 2228-2229, 2229-2230, 2230-2231, 2231-2232, 2232-2233, 2233-2234, 2234-2235, 2235-2236, 2236-2237, 2237-2238, 2238-2239, 2239-2240, 2240-2241, 2241-2242, 2242-2243, 2243-2244, 2244-2245, 2245-2246, 2246-2247, 2247-2248, 2248-2249, 2249-2250, 2250-2251, 2251-2252, 2252-2253, 2253-2254, 2254-2255, 2255-2256, 2256-2257, 2257-2258, 2258-2259, 2259-2260, 2260-2261, 2261-2262, 2262-2263, 2263-2264, 2264-2265, 2265-2266, 2266-2267, 2267-2268, 2268-2269, 2269-2270, 2270-2271, 2271-2272, 2272-2273, 2273-2274, 2274-2275, 2275-2276, 2276-2277, 2277-2278, 2278-2279, 2279-2280, 2280-2281, 2				

Were core samples taken? Yes \_\_\_\_\_ No \_\_\_\_\_

Were cuttings caught during drilling? Yes \_\_\_\_\_ No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list \_\_\_\_\_

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please refer to the attached perforation and fracture treatment report.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: \_\_\_\_\_ Top Depth \_\_\_\_\_ / \_\_\_\_\_ Bottom Depth \_\_\_\_\_  
Surface: \_\_\_\_\_

0'-400' shale	1200'-1242' shale	1761'-1921' Big Injun
400'-409' shale	1242'-1243' coal	1921'-2077' shale
409'-427' siltstone	1243'-1258' shale	2077'-2174' Weir
427'-454' shale	1258'-1260' coal	2174'-2271' shale
454'-479' limestone	1260'-1286' shale	2271'-2273' Berea
479'-779' shale	1286'-1289' coal	2273'-2461' shale
779'-780' coal	1289'-1397' shale	2461'-2515' Gordon
780'-985' shale	1397'-1398' coal	2515'-2704' shale
985'-1026' sand	1398'-1555' shale and sand	2704'-2714' Fifth Sand
1026'-1092' shale	1555'-1559' coal	2714'-6329 Devonian Shale
1092'-1131' sand	1559'-1625' Maxton	6329'-6354' Upr Marcellus
1131'-1133' coal	1625'-1643' shale	6354'- 6393' Tully
1133'-1154' shale	1643'-1662' Little Lime	6393'- 6455' Marcellus
1154'-1199' sand	1662'-1672' shale	6455' Marcellus
1199'-1200' coal	1672'-1761' Big Lime	

Weese Hunter #1002  
Perf Spacing for 1 stage

Perf Interval: 6420'-6415' ; 6403'-6398' ; 6350'-6345'

					FT	PSI	PSI	BPM	BPM		
	Plug Depth	Interval 1	Interval 2	Interval 3	Stage Length	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Vol (bbls)	Total Sand (lbs)
Stage 1	6449'	6420'-6415'	6403'-6398'	6350'-6345'	75	4153	4230	85	85	10025	427000

WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: August 24, 2012  
API #: 47-097-03841

Farm name: Scott Operator Well No.: #1-WV0437

LOCATION: Elevation: 2060 Quadrangle: Alton 7.5'

District: Mead County: Upshur  
Latitude: 38 Feet South of 52 Deg. 30 Min.  Sec.   
Longitude 80 Feet West of 12 Deg. 30 Min.  Sec.

Company: Mountain V Oil & Gas, Inc.

Address: <u>PO Box 470</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Bridgeport WV 26330</u>	<u>13 3/8"</u>	<u>31'</u>	<u>31'</u>	<u>sanded in</u>
Agent: <u>S. Michael Shaver</u>	<u>9 5/8"</u>	<u>126'</u>	<u>126'</u>	<u>60 sks</u>
Inspector: <u>Bill Hatfield</u>	<u>7"</u>	<u>1646'</u>	<u>1646'</u>	<u>250 sks</u>
Date Permit Issued: <u>3-25-2012</u>	<u>4 1/2"</u>	<u>7342'</u>	<u>7342'</u>	<u>150 sks</u>
Date Well Work Commenced: <u>8-15-12</u>				
Date Well Work Completed: <u>8-24-12</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7355</u>				
Total Measured Depth (ft):				
Fresh Water Depth (ft.): <u>69'</u>				
Salt Water Depth (ft.): <u>1273'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

RECEIVED  
Office of Oil & Gas

SEP 21 2012

WV Department of  
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft)

Gas: Initial open flow Odor MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 500,000 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests 216 Hours

Static rock Pressure 2480 psig (surface pressure) after 24 Hours

Second producing formation  Pay zone depth (ft)

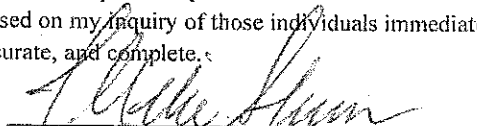
Gas: Initial open flow  MCF/d Oil: Initial open flow  Bbl/d

Final open flow  MCF/d Final open flow  Bbl/d

Time of open flow between initial and final tests  Hours

Static rock Pressure  psig (surface pressure) after  Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

  
Signature

9-19-12  
Date

Were core samples taken? Yes \_\_\_\_\_ No ☒ \_\_\_\_\_

Were cuttings caught during drilling? Yes ☒ \_\_\_\_\_ No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR/NEU/DEN/IND/TEMP/AUDIO

**NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.**

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7296-7299 (12 holes), 7306-7312 (24 holes), 7321-7328 (28 holes)

2004 sks 80/100 sand

3615 sks 40/70 sand

Breakdown psi @ 2800

13,570 bbls fluid

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered:	Top Depth	/	Bottom Depth
-------------------------	-----------	---	--------------

Surface:

Sand / Shale	Ground Level / 7096
--------------	---------------------

Geneseo Shale	7096 / 7132
---------------	-------------

Tully Limestone	7132 / 7160
-----------------	-------------

Hamilton Shale	7160 / 7242
----------------	-------------

Marcellus	7242 / 7337
-----------	-------------

Onondoga	7337 / TD
----------	-----------